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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,778	09/29/2003	Volkert A. Zeijlemaker	P0010498.00	2478
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MEDTRONIC, INC. 710 MEDTRONIC PARKWAY NE MINNEAPOLIS, MN 55432-9924				
EXAMINER				
SMITH, RUTH S				
ART UNIT		PAPER NUMBER		
3737				
MAIL DATE		DELIVERY MODE		
08/11/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/673,778

**Applicant(s)**

ZEIJLEMAKER, VOLKERT A.

**Examiner**

Ruth S. Smith

**Art Unit**

3737

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-5,7-12,15,17-21,23-33 and 39-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7-12,15,17-21,23-33 and 39-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 29, 2009 has been entered.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-5, 7-12, 15, 17-21, 23-33, 39-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foster et al (6,925,328) in view of Weisner et al (7,024,249) or Burnes et al (2003/0195571) or Ferek-Petric (2003/0204161). Foster et al disclose an IMD in combination with MRI, whereby some of the components of the IMD are disabled during an MRI scanning session. While Foster et al is silent with respect to the specific components of the circuitry of the IMD, the use of an amplifier is an inherent part of its circuitry and the specific components which are disabled during an MRI scanning session would have been an obvious design choice in view of the lack of any showing of criticality or unexpected results. The IMD can include an implantable pacemaker. The MRI sends out signals that are detected by the IMD (see for example, figure 5) and the signals are evaluated to determine whether or not to disable portions of the IMD. MRI inherently includes application of gradient magnetic fields. Foster et al fails to disclose the use of wireless telemetry to send control signals to the IMD. The use of wireless control signals is a well known expedient in the art as shown for example in Weisner et al, Burnes et al and Ferek-Petric. Weisner et al disclose the use of control signals to control implantable devices through wireless telemetry. Burnes et al and Ferek-Petric

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each disclose the use of wireless telemetry to control and implantable device. It would have been obvious to one skilled in the art to have modified Foster et al such that the control signals used to indicate the activation of the MRI pulse sequence are sent using wireless telemetry. The modification of Foster et al to include wireless control would include having the control signals come from the MRI system controller. The MRI controller would include a "programmer device" as set forth in claim 4. With regard to claims 5, 7-8, Foster et al disclose timing of the IMD with the MRI system. With regard to claims 9,10, Foster et al disclose that the components are disabled for a time period and then are re-enabled following that time period. A signal received from the MRI system would inherently define "blanking" of components of the MRI system. Foster et al disclose the use of a counter which triggers a re-set function to re-enable the components of the IMD after a predetermined period of time. Foster et al fails to specifically disclose that the blanking occurs for a time period beginning prior to and including delivery of the EM bursts to the patient. It would have been obvious to one skilled in the art to have slightly expanded to time period during which the blanking occurs in order to ensure that the blanking period does not start late or end early. The inventive concept disclosed by Foster et al is to ensure that the IMD doesn't operate during the MRI scanning session. In order to ensure that the blanking is activated during the EM bursts and taking into consideration possible system delays, it would have been obvious to one skilled in the art to have slightly enlarged the time period for blanking to ensure proper results.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1, 3-5, 7-12, 15, 17-21, 23-33, 39-45 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth S. Smith whose telephone number is 571-272-4745. The examiner can normally be reached on M-F 7:30 AM-4:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ruth S. Smith/  
Primary Examiner, Art Unit 3737

RSS